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--------------------------------------------------------------------------------
                Mauna Loa Solar Observatory Observer's Log
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          Thu Jan 21 18:26:29 GMT 1999
Year: 99  Doy: 021
Observer: koon
WEATHER COMMENT: Thu Jan 21 18:26:40 GMT 1999
Clear sky, wind=5 mph from the South, temp=45 F.
COMMENT: Thu Jan 21 18:26:58 GMT 1999
Read the HELCO meters this morning.
Thu Jan 21 18:28:48 GMT 1999    CHIP     Startup--Initializing new tape
Thu Jan 21 18:32:02 GMT 1999    MKIII    Start Patrol
Thu Jan 21 18:32:13 GMT 1999    PICS     Start Patrol
Thu Jan 21 18:32:13 GMT 1999    PICS     Start Patrol
COMMENT: Thu Jan 21 18:55:01 GMT 1999
Guiding seems off in declination, repointed and reset the declination
guider to fix it.  It's looking good now.
**LOW-L PROBLEM**: Thu Jan 21 18:57:04 GMT 1999
Time is 11 seconds slow again.
Thu Jan 21 19:01:35 GMT 1999    PICS     Flat
Thu Jan 21 19:02:57 GMT 1999    CHIP     Bias
Thu Jan 21 19:03:15 GMT 1999    PICS     End Flat
Thu Jan 21 19:03:52 GMT 1999    CHIP     End Bias
Thu Jan 21 19:04:02 GMT 1999    CHIP     Water
Thu Jan 21 19:04:58 GMT 1999    CHIP     End Water
Thu Jan 21 20:01:33 GMT 1999    PICS     Flat
Thu Jan 21 20:02:27 GMT 1999    MKIII    Start Cal
Thu Jan 21 20:02:52 GMT 1999    CHIP     Gain
Thu Jan 21 20:03:04 GMT 1999    PICS     End Flat
Thu Jan 21 20:07:26 GMT 1999    CHIP     End Gain
Thu Jan 21 20:07:36 GMT 1999    CHIP     Bias
Thu Jan 21 20:08:25 GMT 1999    CHIP     End Bias
Thu Jan 21 20:08:35 GMT 1999    CHIP     Water
Thu Jan 21 20:09:10 GMT 1999    CHIP     End Water
Thu Jan 21 20:22:38 GMT 1999    MKIII    Start Patrol
Thu Jan 21 21:00:53 GMT 1999    CHIP     Bias
Thu Jan 21 21:01:38 GMT 1999    PICS     Flat
Thu Jan 21 21:01:52 GMT 1999    CHIP     End Bias
Thu Jan 21 21:02:09 GMT 1999    CHIP     Water
Thu Jan 21 21:02:46 GMT 1999    CHIP     End Water
Thu Jan 21 21:03:17 GMT 1999    PICS     End Flat
PSPT COMMENT: Thu Jan 21 21:04:33 GMT 1999
So far all the images I've seen today look good, I haven't seen any
darkened images like some from yesterday.
**LOW-L PROBLEM**: Thu Jan 21 21:10:28 GMT 1999
I'm working on the clock problem.  It was still 11 seconds slow today.
I stopped the program using "q" during the sync cycle.  Then did a CTRL-C
to stop the startup batch file.  The DOS clock was showing the same time as
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the readout on the observing screen. Then I checked the cts10 board time
and it also showed the incorrect time.
LOW-L PROBLEM: Thu Jan 21 21:33:22 GMT 1999
I checked the autoexec.bat file to see if there were any cts10 related
commands, I didn't see any, and when I tried to run autoexec with the
incorrect DOS time it started the observing program with the same
incorrect time. I'm trying to find out why rebooting the computer
causes the observing program to start up with the correct time. It
doesn't look like it is caused by autoexec.bat. I did see a cts10
command line in the config.sys file. The weird thing about the autoexec
file was that the "lowl" command to start the observing program was
already commented out, the next line had the command "splat" and when
I commented that out then the observing program wouldn't be started
by autoexec.
LOW-L PROBLEM: Thu Jan 21 21:57:04 GMT 1999
When I try running "splat" it does everything like typing in "lowl"
except it is harder to exit from at the "sync" cycle because it keeps
trying to restart the lowl program. So this solves the old mystery
of why I can easily stop observing and eject the tapes sometimes while
other times the program would try to restart and sometimes cause
problems. It worked better if we were exiting from the observing
program that was brought up with the lowl command rather than the splat
command, everytime we cycled the power or rebooted that would cause
autoexec to use splat to start observing.
99   CHIP   End Bias
Thu Jan 21 22:03:56 GMT 1999   CHIP   Water
Thu Jan 21 22:04:35 GMT 1999   CHIP   End Water
WEATHER COMMENT: Thu Jan 21 22:08:55 GMT 1999
A few small orographic clouds are passing by.
MKIII COMMENT: Thu Jan 21 22:10:28 GMT 1999
I'm not going to be able to do the Height Mask Test today due to lowl
problems.
LOW-L PROBLEM: Thu Jan 21 22:44:23 GMT 1999
The DEVICE = cts10.sys command line in config.sys apparently loads and
starts the cts10 driver, and that corrects the cts10 time. I checked
the cts10 timelog and saw huge periods in which there is no WWVH signal
sync with the cts10 board, it is only in sync about one hour each day.
When it is out of sync its own on board clock drifts and that erroneous
time is being used to set the DOS clock. So, if nothing else, we could
improve the lowl clock by restarting the cts10 driver more often, by
software if possible.
Thu Jan 21 23:01:43 GMT 1999   PICS   Flat
Thu Jan 21 23:02:07 GMT 1999   CHIP   Bias
Thu Jan 21 23:03:01 GMT 1999   CHIP   End Bias
Thu Jan 21 23:03:12 GMT 1999   CHIP   Water
Thu Jan 21 23:03:19 GMT 1999   PICS   End Flat
Thu Jan 21 23:03:52 GMT 1999   CHIP   End Water
Thu Jan 21 23:11:51 GMT 1999   PICS   End Patrol

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Thu Jan 21 23:16:56 GMT 1999    MKIII    End Patrol
**LOW-L PROBLEM**: Thu Jan 21 23:20:59 GMT 1999
It was beginning to look very puzzling that the correct time was being
held somewhere on the cts10 board and could be accessed with a warm
reboot but couldn't be accessed by the fixtime.c program, but then
David just sent over a revised fixtime.c program.  The old program
wasn't getting the cts10 time correctly and this one was changed to
fix that, so hopefully this will fix the latest clock problem.
I'm going to install the new version and start it up.
**LOW-L PROBLEM**: Thu Jan 21 23:52:27 GMT 1999
OK, the program is back up and observing again.  I removed L00574 from
drive #0 and moved L00575 from #1 to #0 and installed L00576 in drive #1.
CHIP COMMENT: Fri Jan 22 00:01:30 GMT 1999
I accidentally left this running when I stopped the other instruments,
so there is no data on the end of this tape due to no Spar tracking.
Fri Jan 22 00:02:51 GMT 1999    CHIP    ending tape
COMMENT: Fri Jan 22 00:09:05 GMT 1999


TAPES:
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MKIV: 99021
CHIP: C00766
PICS: P01379
LOWL: L00574 and L00575 in drive #0

Fri Jan 22 00:10:17 GMT 1999
        MkIII


18_32.rawmk3    19_30.rawmk3    20_38.rawmk3    21_37.rawmk3    22_35.rawmk3
18_35.rawmk3    19_33.rawmk3    20_42.rawmk3    21_40.rawmk3    22_38.rawmk3
18_38.rawmk3    19_36.rawmk3    20_45.rawmk3    21_43.rawmk3    22_41.rawmk3
18_41.rawmk3    19_39.rawmk3    20_48.rawmk3    21_46.rawmk3    22_44.rawmk3
18_45.rawmk3    19_43.rawmk3    20_51.rawmk3    21_49.rawmk3    22_48.rawmk3
18_48.rawmk3    19_46.rawmk3    20_55.rawmk3    21_53.rawmk3    22_51.rawmk3
18_51.rawmk3    19_49.rawmk3    20_58.rawmk3    21_56.rawmk3    22_54.rawmk3
18_54.rawmk3    19_52.rawmk3    21_01.rawmk3    21_59.rawmk3    22_57.rawmk3
18_58.rawmk3    19_56.rawmk3    21_04.rawmk3    22_02.rawmk3    23_00.rawmk3
19_01.rawmk3    19_59.rawmk3    21_07.rawmk3    22_06.rawmk3    23_04.rawmk3
19_04.rawmk3    20_05.rawmk3    21_11.rawmk3    22_09.rawmk3    23_07.rawmk3
19_07.rawmk3    20_12.rawmk3    21_14.rawmk3    22_12.rawmk3    23_10.rawmk3
19_10.rawmk3    20_19.rawmk3    21_17.rawmk3    22_15.rawmk3    23_13.rawmk3
19_14.rawmk3    20_22.rawmk3    21_20.rawmk3    22_18.rawmk3    c20_02.rawmk3
19_17.rawmk3    20_25.rawmk3    21_24.rawmk3    22_22.rawmk3    c20_09.rawmk3
19_20.rawmk3    20_29.rawmk3    21_27.rawmk3    22_25.rawmk3    c20_15.rawmk3
19_23.rawmk3    20_32.rawmk3    21_30.rawmk3    22_28.rawmk3
19_27.rawmk3    20_35.rawmk3    21_33.rawmk3    22_31.rawmk3
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